

TRANSPARENT CONDUCTIVE FILM AND FORMATION OF TRANSPARENT ELECTRODE

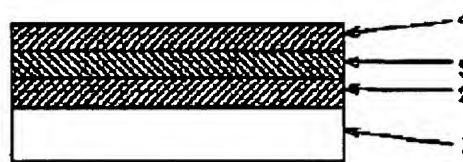
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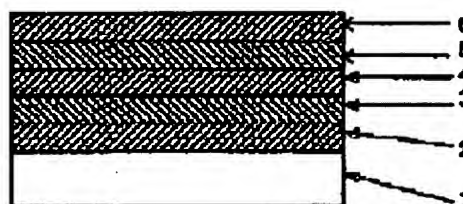
Abstract of JP11070610

PROBLEM TO BE SOLVED: To enhance not only low specific resistance and durability but also minuscule electrode processability by adding ZnO to a transparent oxide layer to obtain an oxide layer containing In within a specific value range with respect to the sum total of Zn and In and forming a metal layer as an Ag-containing metal layer.

SOLUTION: As a substrate 1, a glass plate, a resin film or the like is used. Transparent oxide layers 2, 4, 6 are oxide layers containing ZnO and containing In within a 9-98 atomic % range with respect to the sum total of Zn and In and enhanced in the durability against an alkali soln. or an acidic soln. Subsequently, since metal layers 3, 5 contain Ag and the transparent oxide layers contain ZnO, the crystallization of Ag is accelerated even under a low temp. film forming condition of 150 deg.C or lower and the lowering of the specific resistance of the Ag-containing metal layers and the reduction of the flocculation of Ag are prevented. By this constitution, low specific resistance can be easily realized and durability such as alkali resistance, humidity resistance or the like can be enhanced.



(a)



(b)

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